

RTIP ID# (required): 4M07035 and 34011				
TCWG Consideration Date: March 24, 2009				
Project Description (clearly describe project)				
<p>The California Department of Transportation (Department) proposes to widen existing State Route 138 (SR-138) from two lanes to four lanes in both directions in order to provide operational improvements, efficiency and safety. The project limits are from State Route 18 (SR-18) in Los Angeles County (PM 69.3) to Interstate 15 (I-15) in San Bernardino County (PM 15.2).</p> <p>It is proposed to construct the project in two phases, hence the two RTIP identification numbers. The Phase 1 portion would be located entirely within San Bernardino County, and would extend from Phelan Road (PM 2.9) to I-15 (PM 15.2). Phase 1 is identified in the RTIP under project ID# 34011. The Phase 2 portion would be located partially with Los Angeles and San Bernardino Counties, and would extend from SR-18 (PM 69.3) to county line (PM 75.0) and from county line (PM 0.0) to Phelan Road (PM 2.9). Phase 2 is identified in the RTIP under project ID# 4M07035. A regional location map is provided in Figure 1. One build alternative has been proposed, which is described below.</p> <p>Under the Build Alternative, SR-138 would be realigned and widened from a two-lane conventional highway to a four-lane expressway with a median left-turn lane. The proposed facility would consist of two 3.6-meter lanes in each direction, a 2.4-meter outside shoulder lane in each direction, and a 4.2-meter median lane. In addition, proposed improvements would include the widening of five bridge structures present within the project limits: California Aqueduct (53-2174), Sheep Creek (54-0810), Pine Lodge West OH (54-1056), Pine Lodge East OH (54-1057) and Cajon Creek (54-0561). All bridge widenings would be designed to accommodate the full width of proposed traveled way and paved shoulder areas. Project construction limits and typical cross-section drawing are provided in Figure A-1 and A-2, respectively.</p>				
Type of Project (use Table 1 on instruction sheet): Change to existing state highway				
County San Bernardino and Los Angeles	Narrative Location/Route & Postmiles: Project is located on SR-138, between SR-18 in Los Angeles County and I-15 in San Bernardino County. Within Los Angeles County, project limits extend from PM69.3 to PM 75.0 (county line). Within San Bernardino County, project limits extend from PM 0.0 to PM 15.2. See Figure A-1 attached. Caltrans Projects – EA# 3401U0			
Lead Agency: California Department of Transportation (Caltrans)				
Contact Person Tony Louka	Phone# 909-383-6385	Fax# 909-383-5975	Email tony_louka@dot.ca.gov	
Hot Spot Pollutant of Concern (check one or both) PM2.5 PM10 X				
Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)				
Categorical Exclusion (NEPA)	<input checked="" type="checkbox"/> EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other
Scheduled Date of Federal Action:				
NEPA Delegation – Project Type (check appropriate box)				
Exempt	Section 6004 – Categorical Exemption		<input checked="" type="checkbox"/> Section 6005 – Non-Categorical Exemption	
Current Programming Dates (as appropriate)				
	PE/Environmental	ENG	ROW	CON
Start	07/11/2006	03/07/2010	02/10/2010	03/22/2012
End	01/21/2010	10/07/2011	02/13/2012	2015

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

The purpose of the proposed project is to increase roadway capacity, improve roadway safety features, maintain route continuity, and improve pavement structural integrity. A detailed discussion of each of these elements is provided below:

- **Increase Roadway Capacity.** The existing roadway has insufficient capacity to handle existing and predicted future travel demand. Travel on the two-lane facility is forecasted to increase substantially within along the SR-138 project limits from an existing (year 2008) range of approximately 10,900 to 19,300 vehicles per day (vpd), dependent on roadway segment, to a range of approximately 13,400 to 33,300 vpd at horizon year 2035. Since SR-138 remains the main link between the economic centers and rapidly developing high desert communities for interregional travelers within the project vicinity, no other viable alternatives for travel exist. The Department projects the Level of Service (LOS) to deteriorate from the current (year 2008) level C or E, dependent on roadway segment, to LOS E or F at horizon year 2035 under the no build condition. With construction of the proposed project, roadway segment would operate at LOS A through C at horizon year 2035.
- **Improve Safety Features.** The existing two-lane highway is restricted in its utility because of the continuing growth of traffic, which results in lack of passing opportunities due to limited sight distance. The actual fatal accident rate for some sections of this route is twice the rate for a similar type of facility in the State. In its present condition at various locations, the facility lacks designated left turn lanes. In addition, recovery areas are limited due to existing narrow shoulders. The lack of adequate turning facilities has not only contributed to collisions, but it also has an adverse impact on the operational efficiency of the facility. The existing pavement in various locations has deteriorated and signs of distress are noticeable. The new four-lane expressway would improve safety with the following design features: 1) upgrading from two to four lanes to allow for better passing and increased sight-distance; 2) installing a median left turn lane to reduce the number of accidents; and 3) installing a clearance zone (clear recovery zone) from the edge of the traveled roadway to allow for errant drivers to regain control.
- **Maintain Route Continuity.** SR-138 is classified as a “High Emphasis Focus Route” under the Interregional Road System (IRRS), which requires a minimum facility standard of a four-lane expressway. The existing SR-138 within the project limits consists of only two lanes. The east and west ends adjacent to the proposed project are four lanes. As such, the proposed project would close this gap in lane continuity and remove the current bottleneck condition.
- **Improve Pavement Structural Integrity.** Within the project limits of SR-138, the existing pavement section is inadequate to handle the movement of vehicular volumes, which are contributing to rising maintenance costs. It is anticipated that SR-138 will continue to carry high vehicular volumes, since the route is included in the National Network of STAA (Surface Transportation Assistance Act) for oversized trucks as a State Highway Terminal Access Route. The primary purpose of SR-138 is intra-regional travel. SR-138 carries a significant amount of commuter traffic from the rapidly developing high desert and mountain communities and is heavily utilized by recreational travelers and commercial tractor trailers. Pavement rehabilitation would improve ride quality, operational efficiency and reduce future maintenance costs.

Surrounding Land Use/Traffic Generators (*especially effect on diesel traffic*)

Along the 20.9-mile roadway segment that comprises the project limits of SR-138, the most prominent land use designation is Rural Living. In addition, there are some Planned Development areas that include land use designation for some Single Residential, Multiple Residential, Special Development, Office Commercial, Service Commercial, General Commercial, Community Industrial, and Institutional land use districts.

Service Commercial, General Commercial and Industrial uses comprise a very small part of existing and planned land uses. The majority of Commercial land use districts are concentrated in the Pinon Hills area along SR-138. The area in the section between State Route 2 (SR-2) and I-15 is surrounded by San Bernardino National Forest/Resource conservation area. A land use designation map is provided in Figure 2. There are no major industrial uses present along the project limits of SR-138 that would have a material effect on heavy truck volumes on SR-138.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Year 2015 Mainline LOS Analysis		No Build (2-lane)				Build (4-lane)			
From	To	Total AADT	Truck %	Tuck AADT	LOS	Total AADT	Truck %	Tuck AADT	LOS
I-15	Hess Rd	21,300	6%	1,278	E	21,300	6%	1,278	B
Hess Rd	Sheep Creek Rd	19,300	6%	1,158	E	19,300	6%	1,158	B
Sheep Creek Rd	Phelan Rd	18,770	6%	1,126	E	18,770	6%	1,126	B
Phelan Rd	Oasis Rd	20,335	6%	1,220	E	20,335	6%	1,220	B
Oasis Rd	Mountain Rd	21,900	6%	1,314	E	21,900	6%	1,314	C
Mountain Rd	263rd St	15,300	6%	918	D	15,300	6%	918	A
263rd Street	232nd St	14,700	6%	882	D	14,700	6%	882	A
232nd Street	SR-18	16,800	6%	1,008	B	16,800	6%	1,008	B

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Year 2035 Mainline LOS Analysis		No Build (2-lane)				Build (4-lane)			
From	To	Total AADT	Truck %	Tuck AADT	LOS	Total AADT	Truck %	Tuck AADT	LOS
I-15	Hess Rd	33,200	6%	1,992	F	33,200	6%	1,992	C
Hess Rd	Sheep Creek Rd	21,000	6%	1,260	E	21,000	6%	1,260	B
Sheep Creek Rd	Phelan Rd	25,700	6%	1,542	F	25,700	6%	1,542	B
Phelan Rd	Oasis Rd	29,500	6%	1,770	F	29,500	6%	1,770	B
Oasis Rd	Mountain Rd	33,300	6%	1,998	F	33,300	6%	1,998	C
Mountain Rd	263rd St	27,800	6%	1,668	F	27,800	6%	1,668	B
263rd Street	232nd St	26,700	6%	1,602	F	26,700	6%	1,602	C
232nd Street	SR-18	13,400	6%	804	F	13,400	6%	804	A

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Facility is not an interchange or intersection improvement.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Facility is not an interchange or intersection improvement.

Describe potential traffic redistribution effects of congestion relief (*impact on other facilities*)

The Regional Model produced by SCAG predicts AADT volumes based upon socio-economic data received from all of the counties and cities within their jurisdiction. The traffic volumes and peak hour demand are derived from the number of households, population, and number of jobs in the region. The AADT is derived by iterative model runs designed to determine the shortest route for travelers in time and distance.

With respect to the proposed project, SR-138 is the main link between the economic centers and rapidly developing high desert communities for interregional travelers within the project vicinity. Although the roadway is predicted to operate at very low Levels of Service in future years, traffic would not divert to other routes, as no other viable alternatives for travel exist within the project vicinity. Even without development of the proposed project, SR-138 would remain the shortest path for interregional travel, and as such, the demand to use it would still exist. As a result of this phenomenon, the travel demand volume is not predicted vary between the build and no-build alternatives. The build alternative would simply handle a greater volume of vehicles and provide a better Level of Service.

Comments/Explanation/Details (*attach additional sheets as necessary*)

The EPA's March 2006 guidance document *Transportation Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas* references a two step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125,000 AADT volumes. If the first criterion is met, the second criterion is that 8 percent or more of said traffic volumes (i.e., 10,000 vehicles or more) are diesel truck traffic volumes. With respect to traffic volumes along the project limits of SR-138, both opening year (2015) and horizon year (2035) AADT volumes are forecast to be well below the above-mentioned screening-level threshold criteria of 125,000 total AADT traffic volumes. Also, the maximum heavy truck ADT volumes of 1,314 and 1,998 at opening year (2015) and horizon year (2035), respectively, would be well below the threshold screening criteria of 10,000 ADT for heavy trucks. As such, the project would not result in a substantial number of diesel vehicles within the project area (i.e., the project limits of SR-138).

According to the Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas (page 25), this project is not a project of air quality concern under 40 CFR 93.123(b)(1)(i) and (ii).

The project site is not in or affecting an area or location identified in any PM10 implementation plan. The immediate project area is not considered to be a site of violation or possible violation.

The project site is located within the Mojave Desert Air Basin (MDAB) which is classified as attainment/unclassified for the PM2.5 national ambient air quality standard (NAAQS).